

Volatiles from Apple (*Malus domestica*) Eliciting Antennal Responses in Female Codling Moth *Cydia pomonella* (L.) (Lepidoptera: Tortricidae): Effect of Plant Injury and Sampling Technique

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Host Plant Volatiles, *Malus domestica*, *Cydia pomonella*

The antennal responses of codling moth females, *Cydia pomonella*, to volatiles from apple branches with green fruits were recorded by electroantennography coupled to gas chromatography. The antennae strongly responded to 4,8-dimethyl-1,3(*E*),7-nonatriene, linalool, β -caryophyllene, (*E*)- β -farnesene, germacrene D, (*Z,E*)- α -farnesene, (*E,E*)- α -farnesene and methyl salicylate. These compounds were all present in volatile collections on Porapak Q from both living and cut branches. Analysis by the solid phase microextraction technique (SPME) showed that the emission of some electrophysiologically active compounds increased after branches had been cut, especially 4,8-dimethyl-1,3(*E*),7-nonatriene, linalool and (*E,E*)- α -farnesene. The identification of apple volatiles eliciting antennal responses is the first step towards the identification of compounds mediating host-finding and oviposition in codling moth females.